essays, either of well known material or very preliminary observations which are clearly going to constitute a major scientific publication in the future. Rarely are these proceedings very informative. Nevertheless, it is clear that publishing houses are making profits from such enterprises as the proceedings of symposia continue to proliferate. It is clearly "a good thing" to produce a book and conference proceedings are an easy and efficient way of doing this. This preamble is motivated by a general sense of irritation, that the literature is clotted with such volumes which are of limited scientific value. It is perhaps unfair to focus such venom onto a small offering — but it is typical of the genre.

The book has the merit of reporting a conference where physicists, engineers as well as biologists met together to discuss brain blood flow. None of the excitement which might have been generated by such an inter-disciplinary meeting is conveyed. It is not clear from the book when this conference took place. In any event the publication is in 1989 though I suspect the material may well date from 1987 or so.

The book starts off with an excellent précis of the basic physiological principles of regulating blood flow by A M Harper. Dr Harper's pre-eminence in this field is well recognised and this short chapter is eminently readable by anyone and conveys fundamental basic principles coloured by Dr Harper's personal experience. Dr Rowan, also from Glasgow, reviews the use of radionucleids in CBF measurement. Again the space allocated to him makes this of necessity a short and superficial chapter. It might serve as an introduction. A considerable proportion of the remainder of the book is devoted to ^{99m}TcHMPAO. Frequently this is referred to as a new rCBF tracer. Newness is of course relative, but reports of this tracer have appeared in the literature since 1985 at least and a recent supplement of the *Journal of Cerebral Blood Flow and Metabolism* (1988) has provided much more detailed information on this tracer than the present monograph. Some of the chapters are superficial in the extreme, comprising no more than 3 pages.

Each starts off with a statement saying that measurement of cerebral blood flow is of great clinical interest. I suspect that a whole monograph could be written discussing this very point. The evidence presented in the monograph certainly does not convincingly support such a statement. The absence of extensive CBF measuring facilities in routine clinical practice in this country expresses eloquently the point of view of many practitioners. I am not at all sure that reading this volume would get them to change their minds.

There are other chapters, some of them of interest such as that by Derlon and his colleagues from Caen. Unfortunately this is simply a rehash of work published in the open press. The chapters on doppler imaging and spectrum analysis are of some interest and again a reasonable introduction is provided by Hames and Humphries. The five or six chapters which follow this are all very short but more informative than those describing cerebral perfusion work.

I find little to recommend in this volume. I am not clear what readership has been aimed at, but I could find nothing in it that is not available in greater detail elsewhere in easily accessible literature.

R FRACKOWIAK

Advances in Contemporary Neurology Second edition. By FRED PLUM. (Pp 211; £29.12.) Beckenham: F A Davis. 1989.

This book is the latest volume in the prestigious American Contemporary Neurology series, published by F A Davis. The series includes many of the classics of modern neurology, including Gillman's *Cerebellum*, Martin and Reichlin's *Neuroendocrinology*, and Plum and Posner's *Stupor and Coma*. Although very different, this present volume fits in well with the series. It contains six authoritative chapters from fifteen American contributors, although perhaps only two of the six merit star rating.

The selection of topics is wide-ranging. AIDS and mitochondrial disorders must be at the top of any editor's list of priorities, but the book also contains a FDA-orientated chapter on anxiolytics, which contains long lists of approved indications for different benzodiazepines in the USA. Perhaps the rationale here is the possible separation of hypnotic from anxiolytic effects of post-barbiturate compounds such as busiprone. The initial 50-page review of the neurologic complications of AIDS is outstanding. Brew and his colleagues give an up-to-date and concise account of fundamental research as well as clinical experience. Mitochondrial disorders are also well reviewed, starting with the concept that all modern humans may have descended from a single ancestral woman who lived 200 thousand years ago in Africa.

The whole book is a valuable reference source, and here they range from the Z Wiss Zool of 1856, to DNA studies published in *Nature* in 1988, right up to date. Other topics include a new perspective on old poliomyelitis, with the development of post-polio syndromes, characterised by progressive muscle weakness and new musculoskeletal complaints (Dalakas and Hallett), a helpful review of tuberculosis of the central nervous system by Gandy, and a review of the anatomy and function of the human prefrontal cortex by Collins. The standard of writing of the different chapters is a little uneven, but the presentation is never less than clear, and sometimes outstanding. Tables, figures and index are all good. So altogether a mixed bag, but worth the money for the AIDS review alone.

J D PARKES

Clinical Electroencephalography and Topographic Brain Mapping Technology and Practice. By F H DUFFY, V G IYER AND W W SURWILLO (Pp 304; DM180.) Springer-Verlag, Heidelberg. 1989.

This very well illustated, beautifully printed and reasonably priced volume, is the product of three American authors, Duffy from Harvard Medical School and Iyer and Surwillo from the University of Louisville School of Medicine. Given the first author's interest in topographic brain mapping, looking at the title of the volume one might be forgiven for assuming that this subject would form the body of the text. In fact, no more than twenty pages are devoted to brain mapping, including six pages of well annotated coloured illustrations.

The setting out of the text is often interestingly idiosyncratic. Thus on page 3 the reader is confronted with a section on Fourier series and power spectral analysis, while on page nine appears such elementary information that "Chart paper comes in fan-folded or 'accordion-folded' packs. Note that the chart paper is perforated at the folds; this is so that packs fold easily and can be separated readily". The style is unashamedly transatlantic and at times disconcertingly colloquial but the basic principles of EEG technology are usually lucidly explained. The first nine chapters concern technology. Chapter ten deals with simple neurophysiology, but neuroanatomy for EEG technologists is consigned to one of no less than seven appendices. All of these, with the exception of the glossary of major terms used in the text, could have been absorbed into existing chapters and the appendix on EEG recording in patients with infectious disease, or presented as a separate chapter.

Following the neurophysiology section are two further technological chapters on the

recording system and localisation and polarity. There is an introduction to EEG reading and the normal EEG is described, but the chapter on abnormal EEG patterns precedes that on activation procedures. The chapter on evoked potentials is simply to give sufficient information for the reader to understand the topographical analysis of the E.P. Seizure monitoring and ambulatory EEGs also receive a chapter, but the reader is referred to other texts for the detail of work-up of epileptic patients for surgery. There are two chapters on topographical brain mapping, one on clinical use and the second on recommended standards and practice, both cautious and conservative in their approach.

The final chapter describes the EEG in clinical diagnosis and its relationship to other neurological tests, including computerised tomography, magnetic resonance imaging and positron emission tomography. A number of different clinical disorders are examined and the contribution of the EEG to the clinical diagnosis discussed. Readers of the glossary will be intrigued to learn that the "double banana" montage is the familiar 16 channel temporo-parietal AP montage.

The volume will be of interest to those responsible for training physiological measurement technicians and to those entering the field of clinical neurophysiology as it is refreshingly different to standard English texts, which it complements but does not replace.

D BARWICK

Fetal and Neonatal Neurology and Neurosurgery. Edited by M I LEVENE, M J BENNETT, J PUNT (Pp 618; £95.00.) Edinburgh: Churchill Livingstone 1988.

This handsome quarto volume is a major addition to British paediatric neurological literature and has my vote for the 1988 book of the year. The three editors have written several major chapters themselves and have succeeded in combining the contributions of the 55 other authors into a coherent book with a remarkably even and lucid standard of writing.

Its only major rival is JJ Volpe's "*Neurology of the Newborn*" (2nd edition, 1987), itself an important pioneering work, and one can detect that the new book stands to some extent on Volpe's admirable shoulders. The scope of the two books is virtually the same despite the differences in titles though Jonathan Punt's thoughtful surgical approach in the British book will be helpful to paediatricians in their collaboration over difficult desisions about surgery. After using both for several weeks I have generally found Levene to be more clearly and less densely written and that the specialised expertise of its multiple authorship has the edge over Volpe's singlehanded and very scholarly alternative. One strength of the American book lies in its author's strong grounding in neuropathology, an aspect of training which is sadly lacking in British clinical neurology. However Levene and his colleagues have compensated more than adequately by recruiting Dr Beaugerie and Professor G Lyon from Belgium and Dr JC Larroche from France to write the sections on developmental abnormalities and the pathology of neonatal cerebral haemorrhage and ischaemia. Other contributors include 10 from Australia, 7 from the USA and Canada and 8 from Europe.

The standard of production of the book is generally high but there are some printing errors especially in the figures and legends; the ultrasound illustrations lack pointers or scales. The pictures are generally good but in the chapter on hearing defects the illustrations of the Treacher Collins, Klippel-Feil and Crouzon syndromes should have shown newborn babies; the older childrens' faces were of little help in this context. The index lets one down more often than it should.

D GARDNER-MEDWIN

Mild to Moderate Head Injury. Edited by JULIAN T HOFF, THOMAS E ANDERSON, THEODORE M COLE. (Pp 246; Price: £39.50.) Oxford: Blackwell Scientific Publications, 1989.

The consequences of major head injury are well recognised both as clinical phenomena and in terms of the late neuropsychological defects and the social handicaps they confer. Until recently, the more common minor and moderate injuries have received little systematic investigation. This 1987 international symposium held in Ann Arbor, Michigan, sponsored by General Motors (a praiseworthy, if vested interest) sets out to fill in this gap in our knowledge.

Henry Miller's conclusions that simulation, exaggeration and frank malingering were common features in those seeking judicial compensation were contentious and now often proscribed; the neglect of his clinical data and many similar observations made before and since, may have led to throwing out the baby with the bathwater. A scientific appraisal of certain litigants with trivial injuries whose symptoms and disabilities appear grossly in excess of those reasonably predicted by their head injury should not exclude the multiplicity of readily understood human ambitions and aims which may make the common man or woman seek more money through the judicial process. Sadly, the preface opens: "Patients with mild to moderate brain injury *have* significant cognitive and behavioural problems for months after impact." This assumed bias pervades the whole of the text and is accepted uncritically—even in patients without a graze, bruise or any impairment of consciousness—by the contributors, many of considerable distinction.

The book is in five sections. The first deals with definitions, epidemiology, biochemistry, pathology and experimental brain injury. Part two briefly considers diagnosis, part three clinical management, part four rehabilitation and recovery. Part five, a valuable set of workshops summarises the same ground, but plans future "research agendas".

Despite the implied criticisms above, this work incorporates a vast amount of important data which is attractively presented. A Glasgow Coma Scale (GCS) of 13–15 defines mild or minor, one of 9–12 moderate injury. Age, alcohol and multiple injuries adversely affect prognosis. Patients admitted with GCS of 13–15 may develop serious and sometimes fatal complications, so that further tests of attention and verbal cognition in the acute stage may improve our powers of prognostication. Diffuse axonal injury is an important concept, but since very few patients die its clinico-pathological significance is speculative. MRI detects many lesions in patients with normal CT, and when lesions are shown by both, the MRI lesions are often larger: an indication of the limitation of CT. P^3 latencies often used as an index of attention correlate with post traumatic amnesia.

I would strongly recommend this book to all those involved in the assessment of head injuries as a source of data and reference, and as a statement of contemporary views. It is salutary however, to see how widely critical analysis is sacrificed at the altar of the proof of universal organicity. Time may show that the pendulum has swung too far from the opinions of Henry Miller.

J M S PEARCE

Neurological Examination in Clinical Practice *5th ed.* By EDWIN R BICKERSTAFF, JOHN A SPILLANE. (Pp 371; £39.50.) Oxford: Blackwell Scientific, 1989.

It is difficult to know what to say about a book such as this, as it has shown itself to be of proven worth having reached a fifth